

# ORALHEALTH<sub>ri</sub>

A Quarterly Oral Health Newsletter of the Rhode Island Department of Health

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Donald L. Carcieri  
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## HEALTH NEWS

### Surveys of RI Dentists & Dental Hygienists in Progress

The Oral Health Program, Office of Primary Care is conducting surveys of the state's oral health professional workforce. The questionnaires, mailed to all Rhode Island licensed dentists and dental hygienists, will enable HEALTH to more accurately assess the availability and accessibility of oral health care services statewide. Data from the hygienist surveys will provide insight on the current dental hygienist workforce and will be utilized to guide future policy development. Information provided by the dentists will help to determine current dental service capacity and degree of underservice, if any, for low-income and underinsured populations, consistent with the federal regulations for dental health professional shortage area (DHPSA) designation. This effort is critical to sustaining federal funding eligibility for programs that benefit Rhode Island's neediest residents and is essential to informing policymakers of current dental workforce issues in the state. While participation is voluntary, a significant response rate (~70%) will ensure that the data are valid. If practitioners have not yet returned the completed survey, please do so and join us in this important effort. If you have not received a survey and would like to participate, please contact Maureen Ross, RDH, BS, Oral Health Program Manager, at 222.1171.

## Oral & Pharyngeal Cancer Exam Critical for RI Adults

*Francis J. Connor, Jr., DDS*

Oral and pharyngeal cancers represent a serious national problem. According to the National Cancer Institute, about 30,000 new cases are diagnosed with about 8,000 deaths annually. Most developed countries have similar incidence and mortality rates, however, in lesser developed countries, oral and pharyngeal cancers comprise 30-40% of all reported cancers. In India, for example, the chewing of betel nut is a well-known etiologic factor for oral cancers, particularly those of the tongue and buccal mucosa.

Based upon the U.S. annual incidence and death rates, it can be estimated that approximately 100 new oral and pharyngeal cancer cases and 30 deaths will occur in Rhode Island each year.

Historically, Rhode Island has exceeded the national averages for diagnoses and deaths. Per the State's Cancer Registry, 385 males and 190 females were diagnosed with oral cancers between 1996 and 2000. In addition to death, these cancers and their treatment can be disfiguring, lead to speech impairment, and an inability to swallow.

Squamous cell carcinoma of the tongue is the most common malignancy in the oral cavity, representing ~30-40% of all oral and pharyngeal cancers, followed by malignancies of the floor of mouth, buccal mucosa, and palate. Cancer of the tongue most frequently appears as a lesion on the lateral border near the posterior third of the tongue and may

sometimes be missed during clinical examination. Cancer of the lip represents ~25% of all oral cancers, usually presenting as a chronic non-healing ulcer. Lesions of the floor of the mouth typically present as a painless ulcer but can also appear as a solitary red or white lesion.

**Historically, Rhode Island has exceeded the national averages for oral cancer diagnoses and deaths.**

Cancers of the oral cavity and pharynx are preventable. In the U.S., about 75% of oral and pharyngeal cancers are directly attributable to the use of alcohol and tobacco.

Both of these risk factors have an independent effect on the formation of these cancers, and in combination, their effect is synergistic. By National Cancer Institute measurements, those who smoke and drink heavily have a 35-fold excess risk of developing oral cancer.

Oral health professionals have a vital role in the prevention and early detection of these cancers. In addition to patient education and counseling in the avoidance of risk factors and participation

*continued on page 2*

### IN THIS ISSUE

Dental Sealants for Medicaid Children Are Underutilized	2
Dentists' Guide to Bioterrorism and Catastrophe Response	2
Tooth Loss Linked to Pancreatic Cancer in Smokers	3
ORALHEALTH <sub>ri</sub> Electronic Delivery	3
Unexpected Source of Postnatal Stem Cells	3
Spanish Language Tips for Caring for Young Children's Teeth	3
Announcements	4

*continued from page 1*

in smoking cessation programs, thorough examination of the head, neck and oral cavity are crucial, especially for high-risk individuals. Proper lighting, mouth mirror, gauze, and a tongue depressor are simple tools for conducting a proper oral cancer examination. Inspection of the lips, tongue, buccal mucosa, gingiva, floor of mouth, palate and pharynx can be performed in five minutes. Bimanual palpation using a gloved finger in the floor of the mouth, with a finger on the same side of the neck is important in accurately assessing the structures of the floor of the mouth and neck. Firm, non-mobile masses should be viewed with suspicion when compared to a normal examination. Suspicious lesions must always be biopsied to confirm the absence or presence of malignant disease. Early detection, specialist referral, and proper treatment are critical for ensuring the best chances of survival. As oral health professionals, we have the knowledge, ability, and opportunity to reduce the morbidity and mortality associated with the disease for the benefit of our patients.

## Dental Sealants for Medicaid Children Are Underused

Even when poor and near-poor children have access to a dentist, they may not receive generally accepted recommended care such as dental sealants. All States now include sealants as a dental benefit for children enrolled in their Medicaid dental programs; however, dental sealants are underutilized. An AHRQ-funded study examining the dental experiences of 15,438 children enrolled in the North Carolina Medicaid program from 1985 to 1992 found that sealants were effective in preventing tooth decay on the occlusal surfaces of bicuspid and molars. This reduced the need for caries-related services involving the occlusal surfaces (CRSOs) of these teeth. The most effective use of sealants was among children who had more dental services for cavities before sealant placement. Furthermore, researchers found that

restoration rates for high-risk children peaked at 8 years for unsealed teeth and at 9 years for sealed teeth (18 vs. 8 percent). The effects of sealants are greatest when the child is roughly 8 years old; after that age, sealant effectiveness declines.

The Medicaid program saved money by using sealants for children prone to cavities. The greatest difference between expenses for sealed and unsealed teeth (\$15.21 per molar) occurred among the high-risk patients at age 9. These savings were realized within a 2-year period following sealant application among children with two or more prior CRSOs. However, AHRQ research has documented that, in spite of the savings realized from their use, these treatments are underused in the Medicaid program.

Source: [www.ahrq.gov/research/dentalcare/dentria.htm](http://www.ahrq.gov/research/dentalcare/dentria.htm).

## Researchers Publish Guide to Bioterrorism and Catastrophe Response for Dentists

NYU's College of Dentistry (NYUCD) has developed a quick-reference guide that provides dentists with descriptions of agents and diseases that could potentially be used as weapons. *Bioterrorism and Catastrophe Response: A Quick-Reference Guide to Resources* offers fast access to information that would be critical to providing diagnosis and treatment in the event of a catastrophic attack. The Journal of the American Dental Association published the guide in its June issue. NYUCD developed the guide as part of an ongoing effort to raise awareness of the role dentists can play in bioterrorism preparedness. The authors reviewed information from the World Wide Web and print journals regarding the most probable bioterrorist weapons (including anthrax, botulism, plague, smallpox, tularemia, and viral hemorrhagic fevers) and distilled it into a resource

list that is current, relevant to dentistry, and noncommercial. This guide provides dentists with information that could help them make fast, accurate diagnoses that could limit the spread of exceptionally contagious diseases. In addition, the authors want to encourage dentists to provide accurate information to patients to minimize misinformation and the associated public fear and panic that, unchecked, could overwhelm health care systems. *Bioterrorism and Catastrophe Response: A Quick-Reference Guide to Resources*, appears on the Web site of the Journal of the American Dental Association: [www.ada.org/prof/pubs/jada/index.asp](http://www.ada.org/prof/pubs/jada/index.asp).

Source: NYU College of Dentistry [www.nyu.edu/dental/news/bioterror.html](http://www.nyu.edu/dental/news/bioterror.html).

### Editorial Policy

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### Comments? Questions?

Articles, ideas and announcements from readers are welcome. Contact the Oral Health Program at: RI Department of Health  
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Voice: 401.222.1171 / Fax: 401.222.4415

## Tooth Loss Linked to Pancreatic Cancer in Smokers

The more teeth a smoker loses, the higher the risk that s/he will develop pancreatic cancer, according to a new study. Per researchers reported in the American Journal of Clinical Nutrition, the risk of developing pancreatic cancer was 63 percent higher in smokers who had lost all their teeth, compared with those who had lost fewer than 10 teeth. Overall, the risk of pancreatic cancer in the group was about 6 in 1000.

The study does not show that tooth loss causes pancreatic cancer, said lead author Rachel Stolzenberg-Solomon, an investigator at the National Cancer Institute. Tooth loss could simply be a marker for some other factor that leads to cancer, such as an unhealthy lifestyle. On the other hand, smokers who have lost all their teeth may have more bacteria in their mouths, which may lead to higher levels of bacteria in the gut.

Stolzenberg-Solomon noted that there is a hypothesis that connects bacterial load with pancreatic cancer. Bacteria in the stomach convert nitrates and nitrites into nitrosamines, and

nitrosamines are carcinogens.

For this study, researchers examined the medical records of 29,104 male smokers aged 50 to 69 who were followed from 1985 to 1997. The participants' oral health was assessed at the outset of the study. By the study's conclusion, 174 men had developed pancreatic cancer. After taking age, education, and place of residence (rural vs. urban) into account, the researchers found that the men were 63 percent more likely to develop pancreatic cancer if they had lost all their teeth.

While the new study does not prove that the conditions that promote tooth loss lead to an elevated cancer risk, it does underscore the importance of good oral hygiene. Studies have shown that the use of dental floss and toothpaste are linked with lower risk of cancers of the mouth and esophagus.

Source: American Journal of Clinical Nutrition 2003; 78:176-181.  
www.ajcn.org/cgi/content/abstract/78/1/176

## ORALHEALTHri Electronic Delivery Available

Beginning with the December 2003 issue, ORALHEALTHri will be available via e-mail for readers who prefer electronic delivery. If you who would like to receive the newsletter by e-mail, contact Deb Fuller, DMD, Oral Health Program Specialist, at 401-222-1171 or [DebF@doh.state.ri.us](mailto:DebF@doh.state.ri.us). ORALHEALTHri is also available at [www.health.ri.gov/disease/primarycare/oralhealth/news.htm](http://www.health.ri.gov/disease/primarycare/oralhealth/news.htm).

## Unexpected Source of Postnatal Stem Cells

Scientists report for the first time that deciduous teeth contain a rich supply of stem cells in their pulp. The researchers say this unexpected discovery could have important implications because the stem cells remain alive inside the tooth for a short time after it falls out of a child's mouth, suggesting the cells could be readily harvested for research.

According to the scientists, who published their findings in the Proceedings of the National Academy of Sciences, the stem cells are unique compared to many "adult" stem cells in the body. They are long lived, grow rapidly in culture, and, with careful prompting in the laboratory, have the potential to induce the formation of specialized dentin, bone, and neuronal cells. If follow-up studies extend these initial findings, scientists speculate that they may have identified an important and easily accessible source of stem cells that possibly could be manipulated to repair damaged teeth, induce the regeneration of bone, and treat neural injury or disease.

The cells have been named SHED, which stands for Stem cells from Human Exfoliated Deciduous teeth.

Source: [www.nidr.nih.gov](http://www.nidr.nih.gov).

## CDC Provides Spanish Language Tips on Caring for Young Children's Teeth

To assist Hispanic parents in caring for their children's teeth, the Centers for Disease Control and Prevention (CDC) has released pediatric oral health tips in Spanish, *Refresque Sus Conocimientos sobre Dientes Sanos: Pasos Sencillos para Sonrisas Infantiles* (Refresh your Knowledge of Healthy Teeth: Simple Steps for Kids' Smiles). The tips recommend good oral care habits starting in infancy and provide information on the proper use of toothpaste and other fluoride products.

Hispanic children, 2-5 years of age, have more tooth decay in their primary teeth than either white or

African American pre-school children. The Third National Health and Examination Survey showed that more than twice as many Mexican American children (35 percent) as white children (14 percent) in this age group have untreated tooth decay.

To receive copies of *Refresque Sus Conocimientos sobre Dientes Sanos: Pasos Sencillos para Sonrisas Infantiles* send a request to [brushup@cdc.gov](mailto:brushup@cdc.gov).

For more information in Spanish on oral health and the benefits of fluoride, visit CDC's Web site at [www.cdc.gov/spanish/dental/](http://www.cdc.gov/spanish/dental/).

## ANNOUNCEMENTS

**RI Board of Examiners in Dentistry****Board Meetings**

RI Department of Health, Providence, RI

October 22, 2003 @ 9:30 AM

November 19, 2003 @ 9:30 AM

December 17, 2003 @ 9:30 AM

For information, call Gail Giuliano at 401.222.2151

**RI Dental Association**

*Recipes for Predictable Anterior Esthetics* (7 CEUs)

Providence Marriott Hotel, Providence, RI

November 12, 2003 @ 9:00 AM - 5:00 PM

For information, call Valerie Donnelly at 401.732.6833

**RI Dental Assistants Association**

*Domestic Violence and the Dental Professional* (3 CEUs)

St. Joseph Hospital Fatima Unit, Providence, RI

October 21, 2003 @ 7:00 PM

*Implant-Supported Maxillary and Mandibular  
Overdentures* (2 CEUs)

St. Joseph Hospital Fatima Unit, Providence, RI

January 13, 2004 @ 7:00 PM

For information, call Joanne Wilbur at 401.647.2175

**RI Dental Hygienists' Association**

*Eating Disorders of Children and Adolescents* (2 CEUs)

Kent County Hospital, Warwick, RI

October 14, 2003 @ 7:30 PM

*Hygienists-in-Action Volunteer Program* (3 CEUs)

St. Joseph Hospital, Providence RI

October 18, 2003 @ 9:00 AM – 1:00 PM

*A Simplified Approach to Today's Periodontics* (3 CEUs)

Radisson Airport Hotel, Warwick, RI

November 9, 2003 @ 8:30 AM (Brunch)

For information, call Mary Anne Barry at 401.821.2373

**RI Oral Health Professional Advisory Council**

RI Department of Health, Providence, RI

October 29, 2003 @ 7:30 AM – 9:00 AM

For information call, Carla Lundquist at 401.222.7626

**RI Special Senate Commission on Oral Health**

RI Department of Health, Providence, RI

December 3, 2003 @ 8:30 AM – 10:00 AM

For information, call Marie Ganim at 401.222.1772

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[www.health.ri.gov](http://www.health.ri.gov)



*A Healthy Smile Can Last A Lifetime*

[www.health.ri.gov/disease/primarycare/oralhealth/home.htm](http://www.health.ri.gov/disease/primarycare/oralhealth/home.htm)